# **Refine Search**

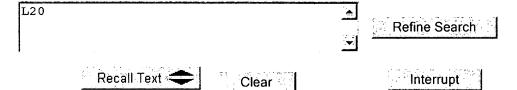
### Search Results -

Terms	Documents
L19 and inhal\$	170

US Pre-Grant Publication Full-Text Database
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EPO Abstracts Database
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## **Search History**

# DATE: Thursday, March 16, 2006 Printable Copy Create Case

Set Name side by side	Query	<u>Hit</u> <u>Count</u>	Set Name result set
DB=I	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD; PLUR=YES; OP=OR		
L20	L19 and inhal\$	170	<u>L20</u>
L1 <u>9</u>	L18 and @pd<20020821	2294	L19
<u>L18</u>	((medicament or active or drug or pharmaceutical or therapeutic) near5 coat\$) near5 (carrier or excipient)	3487	<u>L18</u>
<u>L17</u>	((medicament or active or drug or pharmaceutical or therapeutic) near5 monolayer) near5 carrier	3	<u>L17</u>
L16	L15 and formoterol	3	<u>L16</u>
L15	L13 and @pd<20020821	418	<u>L15</u>
<u>L14</u>	L13 and@pd<20020821	37096764	<u>L14</u>
L13	(medicament or active or drug or pharmaceutical or therapeutic) near5 monolayer	853	<u>L13</u>
L12	L8 and formoterol	12	<u>L12</u>
<u>L11</u>	L8 and formoterol and budesonide	11	<u>L11</u>

<u>L10</u>	L7 and @pd<20020821	10	<u>L10</u>
<u>L9</u>	(geometric adj mixing) and L4	3	<u>L9</u>
<u>L8</u>	monolayer near10 ((carrier or lactose) or (medicament or active or drug or pharmaceutical or therapeutic))	2425	<u>L8</u>
<u>L7</u>	L6 and (MDPI or (multi adj dose adj dry adj powder adj inhaler))	74	<u>L7</u>
<u>L6</u>	L4 near10 L5	6047	<u>L6</u>
L5	inhal\$	93925	<u>L5</u>
<u>L</u> 4	dry adj powder	42864	<u>L4</u>
<u>L3</u>	L1 near10 L2	31499	<u>L3</u>
<u>L2</u>	lactose	134651	<u>L2</u>
<u>L1</u>	carrier	1549840	<u>L1</u>

END OF SEARCH HISTORY

M First Hit Previous Doc Next Doc Go to Doc#

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L20: Entry 158 of 170

File: DWPI

Jun 2, 2005

DERWENT-ACC-NO: 2001-147272

DERWENT-WEEK: 200537

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TITLE: Particles with a perfectly smooth surface and having a specified median diameter and surface rugosity are prepared by treatment with a high speed mixer-granulator, useful as carriers in <u>inhalation</u> powder mixtures with micronized drugs

INVENTOR: BETTINI, R ; CAPONETTI, G ; CATELLANI, P L ; COLOMBO, P ; VENTURA, P

PATENT-ASSIGNEE:

ASSIGNEE

CODE

CHIESI FARM SPA

CHIEN

PRIORITY-DATA: 1999IT-MI01582 (July 16, 1999)

Search Selected	Search ALL Clear

#### PATENT-FAMILY:

	PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
Γ	US 20050118113 A1	June 2, 2005		000	A61K031/4745
Γ	WO 200105429 A2	January 25, 2001	E	039	A61K047/00
Γ	AU 200068232 A	February 5, 2001		000	A61K047/00
Γ	EP 1196146 A2	April 17, 2002	E	000	A61K009/14
Γ	BR 200012351 A	June 11, 2002		000	A61K047/00
_	IT 1313047 B	May 30, 2002		000	A61K000/00
Г	US 6780508 B1	August 24, 2004		000	B32B005/16

DESIGNATED-STATES: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW AL AT BE CH CY DE DK ES FI FR GB GR CY DE DK ES FI FR GB CY DE DK ES FI FR CY DE DK ES FI FR GB CY DE DK ES FI FR CY DK

#### APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
US20050118113A1	July 13, 2000	2000WO-EP06690	Cont of
US20050118113A1	April 16, 2002	2002US-0030686	Cont of

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Search E **Generate Collection** Print Results

**User Searches** 

Preferences L20: Entry 158 of 170

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File: DWPI

Jun 2, 2005

DERWENT-ACC-NO: 2001-147272

DERWENT-WEEK: 200537

COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Particles with a perfectly smooth surface and having a specified median diameter and surface rugosity are prepared by treatment with a high speed mixer-granulator, useful as carriers in inhalation powder mixtures with micronized drugs

#### Basic Abstract Text (1):

NOVELTY - Carrier particles for use in powdery mixtures for inhalation of micronized drugs via dry powder inhalers, have a smooth surface and are prepared by treatment with a high speed mixer-granulator.

#### Basic Abstract Text (2):

DETAILED DESCRIPTION - Carrier particles for use in formulations for pulmonary administration of micronized drugs via a powder inhaler have median diameter greater than 90 mu m and surface rugosity at most 1.

#### Basic Abstract Text (6):

(c) pharmaceutical compositions for inhalation, obtained by mixing active principles in the form of micronized powder with particles as above.

#### Basic Abstract Text (7):

USE - For administration of drugs by inhalation, particularly drugs for the treatment of respiratory diseases such as beta -agonists (e.g. salbutamol, formoterol, salmeterol and terbutaline), antiinflammatory steroids (e.g. beclometasone dipropionate, flunisolide and budesonide) or an anticholinergic (e.g. ipratropium bromide or oxitropium bromide). Any active ingredient suitable for endobronchial administration may be used.

#### Basic Abstract Text (8):

ADVANTAGE - The method makes the surface of the particles of the carrier smooth, without any roughness or hollows, clefts and sharp edges, which represent sites of high surface energy to which the drug particles might adhere. The method permits improvement of the uniformity of the surface characteristics of commercially available substances commonly employed as carriers for inhalation powders, whose characteristics are generally variable. The particles of the additive are not released from the carrier particles during inhalation and so do not reach the smaller branching of the pulmonary tree. Powders for inhalation obtained by mixing the smooth carrier particles (with or without coating) with a micronized drug give rise to a particularly high respirable fraction of drug. The method is rapid and convenient and allows smooth particles to be obtained starting from an industrial powder consisting of rough particles without substantially altering their average size and geometry. The use of the high speed mixer-granulator allows the surface characteristics and shape of particles of pharmaceutical excipients to be altered without agglomerating them and without significantly changing their crystalline etructure and physicochemical properties. The process only gives rise to



Day: Thursday Date: 3/16/2006

Time: 13:07:59

# **Inventor Name Search**

Enter the **first few letters** of the Inventor's Last Name. Additionally, enter the **first few letters** of the Inventor's First name.

Last Name	First Name	
Zeng	Xian-Ming	Search

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L12 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1982:40927 CAPLUS

DOCUMENT NUMBER: 96:40927

TITLE: Solid microdose drug preparation

INVENTOR(S): Fukui, Muneo; Kubota, Yukio; Kawata, Hiroitsu; Konno,

Yutaka; Aruga, Masayoshi

PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 37740	A2	19811014	EP 1981-301521	19810407
EP 37740	A3	19820512		
EP 37740	B1	19851121		
R: CH, DE, FR,	GB, IT	ı		
JP 56140915	A2	19811104	JP 1980-46002	19800407
US 4380534	Α	19830419	US 1981-249886	19810401
ES 501122	A1	19820601	ES 1981-501122	19810406
PRIORITY APPLN. INFO.:			JP 1980-46002 P	19800407

### (FILE 'HOME' ENTERED AT 14:01:31 ON 16 MAR 2006)

	FILE 'CAPLU	S, MEDLINE' ENTERED AT 14:01:43 ON 16 MAR 2006
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L2	6932	S DRY(W) POWDER
L3	1891	S L2 AND INHAL?
L4	.0	S L3 AND (GEOMETRIC (W) MIXING)
L5	340	S L3 AND (BUDESONIDE OR FORMOTEROL(W)FUMARATE(W)DIHYDRATE)
L6	5	S L3 AND (BUDESONIDE AND (FORMOTEROL(W)FUMARATE(W)DIHYDRATE))
L7	160	S L3 AND L1
L8	30	S L7 AND (BUDESONIDE OR (FORMOTEROL(W)FUMARATE))
L9	0	S L8 AND (CARRIER(5A)((COAT? OR MONOLAYER)(5A)(ACTIVE OR PHARM
L10	14933	S (ACTIVE OR PHARMACEUTICAL OR MEDICAMENT OR DRUG OR THERAPEUTI
L11	961	S L10 AND LACTOSE
L12	1	S L11 AND FORMOTEROL
L13	9	S L11 AND BUDESONIDE
L14	30	FOCUS L8 1-

L13 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

TI Pharmaceutical powder formulation for inhalation

AB A pharmaceutical powder, to be administered by inhalation especially for treatment of respiratory diseases, comprises a carrier with a mean particle size of 200-1000 μm, mixed or coated with an active agent with a particle size of 0.1-10 μm. Thus, 266.8 g micronized Na cromoglycate and 133.2 g micronized reproterol-HCl were sieved (mesh size 0.125 mm) and mixed with 600.0 g lactose (particle size 100% <800 μm, ≤7% <200 μm) for 30 min to produce free-flowing agglomerates.

ACCESSION NUMBER: 1996:132907 CAPLUS

DOCUMENT NUMBER: 124:156062

TITLE: Pharmaceutical powder formulation for inhalation

INVENTOR(S): Sarlikiotis, Werner; de Boer, Anne H.

PATENT ASSIGNEE(S): Asta Medica AG, Germany

SOURCE: Ger. Offen., 6 pp. CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	TENT NO.			KINI				AP									
DE	4425255			ΓΔ		1996	กาาล	DE	1	994 -	4425	255		1	9940	716	
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WO	2195065 2195065 9602231			A1		1996	0201	WC	1	995-	EP23	92		1	950	621	
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	76807							HU									
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JP	3011770			B2		2000											
	9508287					1998	0721	BR	1	995-	8287			1	9950	621	
RU	2140260			C1		1999	1027	RU	1	997-	1023	49		1	9950	621	
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ES	2162927			Т3		2002	0116	ES	1	995-	9242	99		1	9950	621	
PT	771189			$\mathbf{T}$		2002	0228	PT	' 1	995-	9242	99		1	9950	621	
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SK	282764			В6		2002	1203	SK	1	997-	56			1	9950	621	
$\mathtt{PL}$	186153			В1		2003	1128	PI TW ZA II HR	, 1	995-	3186	49		1	9950	621	
TW	475904			В		2002	0211	TW	1	995-	8410	6804		1	9950	630	
ZA	9505892			A A1 B1		1996	0219	ZP	1	995-	5892			1	9950	714	
IL	114596			A1		2000	0229	II	. 1	995-	1145	96		1	9950	714	
HR	950403			В1		2001	1231	HF	1	995-	9504	03		1	9950	714	
NO	9700068			Α		1997	0108	NC	1	997-	68			1	9970	108	
NO	315894			B1		2003	1110										
FI	9700164					1997	0115	FI US	1	997-	164			1	9970	115	
US	6284287			B1		2001	0904	US	1	997-	7659	28		1	9970	402	
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								WC	1	995-	EP23	92	1	W 1	9950	621	

L6 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

TI Inhalation formulations for  $\beta$ 2-agonists and

glucocorticosteroids

AB A dry powder composition comprising (a) one or more potent therapeutically active substances selected from the group consisting of glucocorticosteroids,  $\beta 2$ -agonists, and prophylactic agents and (b) a carrier substance. The dry powder composition is in finely divided form with a poured bulk d. of 0.28-0.38 g/mL and is useful in the treatment of respiratory disorders, particularly asthma. For example, 5.2 parts of formoterol fumarate dihydrate and 896.8 parts of lactose monohydrate were mixed and micronized to obtain a particle size of <3  $\mu$ m. Micronized budesonide (98 parts) was added and the mixture was remicronized. The powder was agglomerated,

spheronized and sieved to give a powder with a bulk d. of 0.34 g/mL.

ACCESSION NUMBER: 2000:140546 CAPLUS

DOCUMENT NUMBER: 132:185436

TITLE: Inhalation formulations for β2-agonists

and glucocorticosteroids

INVENTOR(S): Trofast, Jan

PATENT ASSIGNEE(S): Astra Aktiebolag, Swed.

SOURCE: U.S., 4 pp., Cont.-in-part of U.S. Ser. No. 316,938.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 8

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
US 6030604	Α	20000229	US 1998-4902		19980109
US 6371171	B1	20020416	US 1994-316938		19941003
US 6287540	B1	20010911	US 1999-431916		19991102
PRIORITY APPLN. INFO.:			US 1994-316938	A2	19941003
			SE 1997-135	Α	19970120
			SE 1993-3215	Α	19931001
			SE 1993-4270	Α	19931222
			US 1998-4902	A2	19980109

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

TI Pharmaceutical inhalant having a poured bulk density of 0.28 to 0.38 g/ml, a process for preparing the formulation and the use thereof

AB A dry powder composition comprising one or more potent pharmaceutically active substances and a carrier substance, all of which are in finely divided form, wherein the formulation has a poured bulk d. of from 0.28 to 0.38 g/mL is useful in the treatment of respiratory disorders. Thus, 0.0315 parts of formoterol fumarate dihydrate and 2.969 parts of lactose monohydrate was mixed and micronized to obtain a particle size of < 3µm. The powder was then agglomerated, spheronized and sieved to obtain a powder with a bulk d. of 0.32 g/mL.

ACCESSION NUMBER: 1998:509089 CAPLUS

DOCUMENT NUMBER: 129:153236

TITLE: Pharmaceutical inhalant having a poured bulk

density of 0.28 to 0.38 g/ml, a process for preparing

the formulation and the use thereof

INVENTOR(S): Trofast, Jan
PATENT ASSIGNEE(S): Astra AB, Swed.

SOURCE: . PCT Int. Appl., 14 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9831352			WO 1998-SE40	
			BG, BR, BY, CA, CH,	
			GM, GW, HU, ID, IL,	
			LT, LU, LV, MD, MG,	
			SE, SG, SI, SK, SL,	
		N, YU, ZW	52, 50, 51, 5K, 52,	10, 111, 111,
			UG, ZW, AT, BE, CH,	DE. DK. ES. FT.
			NL, PT, SE, BF, BJ,	
		IE, SN, TD,		01, 00, 01, 0,
			ZA 1998-78	19980106
CA 2277913	AA	19980723	CA 1998-2277913	19980113
			AU 1998-57859	
AU 731192	B2	20010329		
EE 9900295	Α	20000215	EE 1999-295	19980113
EE 3951	B1	20030217		
			EP 1998-901618	19980113
		20050202		
			GB, GR, IT, LI, LU,	NL, SE, MC, PT,
IE, SI, I				
BR 9811249	Α	20000905	BR 1998-11249 NZ 1998-336594	19980113
NZ 336594	A	20010126	NZ 1998-336594	19980113
JP 2001508793	Т2	20010703	JP 1998-534218	19980113
RU 2194497	C2	20021220	RU 1999-118587 SK 1999-959	19980113
SK 283950	B6 E T	20040504	SK 1999-959	19980113
AT 288260	E	20050215	AT 1998-901618	19980113
PT 1007017	Т	20050531	PT 1998-901618	19980113
ES 2235311	Т3	20050701	ES 1998-901618	19980113
IL 130838	Al	20050725	IL 1998-130838	19980113
TW 557217	В	20031011	TW 1998-87103589	19980311
IL 130838 TW 557217 MX 9906661 NO 9903539	A	2000.0131	MX 1999-6661	19990716
NO 9903539	Α	19990920	NO 1999-3539	19990719
PRIORITY APPLN. INFO.:			TW 1998-130838 TW 1998-87103589 MX 1999-6661 NO 1999-3539 SE 1997-135 WO 1998-SE40	M 10000112
REFERENCE COUNT:	2	שמא שמשטים	2 CITED REFERENCES A	M TARRETT
REFERENCE COUNT;	2		Z CITED REFERENCES A L CITATIONS AVAILABL	
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L14 ANSWER 6 OF 30 CAPLUS COPYRIGHT 2006 ACS on STN

TI Modified carrier particles for use in dry powder inhalers

AB The invention relates to carrier particles for use in pharmaceutical compns. for the pulmonary administration of medicaments by means of dry powder inhalers. In particular, the invention relates to a novel technol. process for obtaining a carrier modified so as to improve the efficiency of redispersion of active particles and hence increase the respirable fraction. After the treatment of the invention, the surface of said modified carrier particles can also be coated with a suitable additive so as to further improve the respirable fraction.  $\alpha$ -Lactose monohydrate 99.75 % was mixed with 0.25% magnesium stearate and 200  $\mu$ g/dose beclomethasone-17,21-dipropionate. The flowability properties of the carrier did not change significantly even in the presence of ternary mixture and a significant increase of the fine particle fraction was observed with the carrier.

ACCESSION NUMBER: 2000:645829 CAPLUS

DOCUMENT NUMBER:

133:227824

TITLE:

Modified carrier particles for use in dry

powder inhalers

INVENTOR(S):

Musa, Rossella; Bilzi, Roberto; Ventura, Paolo;

Chiesi, Paolo

PATENT ASSIGNEE(S):

Chiesi Farmaceutici S.P.A, Italy

SOURCE:

PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

								APPLICATION NO.								
WO	WO 2000053158						WO 2000-EP1773 BB, BG, BR, BY, CA,					•				
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						MW, MX										
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	IT 1309592				В1	200	20124		IT 1999-MI455				19990305			
IT	99MI	0455			A1	200	00905									
EP	1158	960			A1	200	11205		EP 2	000-	9125	34		2	0000	302
EP	1158	960			B1	200	30604									
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EP	1312	357			A3	200	40107									
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AT	2419	61			E	200 200	30615		AT 2	000-	9125	34		2	0000	302
ES	2199	793	•		Т3	200	40301		ES 2	000-	9125	34		2	0000	302
US	6641	844			В1	200	31104		US 2	001-	9261	05		2	0010	927
US	2004	0091	27		A1	200	40115		US 2	003-	4239	12		2	0030	428
US	2004	0965	16		A1	200	40520		US 2	003-	6284	53		2	0030	729
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REFEREN	REFERENCE COUNT:					THER	e are	4 (								

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

## Refine Search

#### Search Results -

Terms	Documents				
(Xian adj Ming) near2 Zeng	5				

US Pre-Grant Publication Full-Text Database

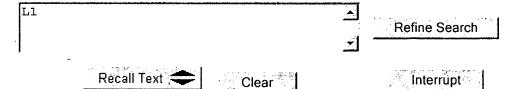
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### **Search History**

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result set

DB=PGPB, USPT; PLUR=YES; OP=OR

L1 (Xian adj Ming) near2 Zeng

5 L1

**END OF SEARCH HISTORY**